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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,280	07/09/2004	David Smith	013344-9047-00	5678
23409	7590	04/24/2006	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			MILLS, DANIEL J	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/501,280

Applicant(s)

SMITH, DAVID

Examiner

Daniel J. Mills

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 2-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 2-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/30/2006.

Specification

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).

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- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "rails set at various angles" claim 9; "laths or panels extend between spaced apart upright posts" claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 15 is objected to because of the following informalities: "from plastics material, metal, or wood, or from a combination of these materials" should be changed to --from one of plastics material, metal, wood, and a combination of these materials--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Barrett (US 3,654,877).

Regarding claim 1, Barrett discloses an interlocking device for locking components together, comprising a first tubular component, a second component arrangeable to interconnect with the first component, the second component having an opening which, in use, lies within the hollow interior of the first component, and a third component insertable into the opening to lie within the hollow interior of the first component thus locking all three components together.

Claims 1, 7, 8, 10-12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsuo (JP 2001-262871).

Regarding claim 1, Mitsuo discloses an interlocking device for locking components together, comprising a first tubular component (10), a second component (20) arrangeable to interconnect with the first component, the second component having an opening which, in use, lies within the hollow interior of the first component, and a

third component (40) insertable into the opening to lie within the hollow interior of the first component thus locking all three components together.

Regarding claim 7, Mitsuo discloses an interlocking device in which the second component fits into an aperture extending through side walls of the first component.

Regarding claim 8, Mitsuo discloses an interlocking device comprising a fence in which a plurality of said first components are spaced apart to form upright posts of the fence and at least one of said second components extends between at least two uprights to form a cross rail of the fence.

Regarding claim 10, Mitsuo discloses an interlocking device where an upright post is secured into ground using foundation bars (35).

Regarding claim 11, Mitsuo discloses an interlocking device wherein laths (20 and 72) or panels extend between spaced apart upright posts.

Regarding claim 12, Mitsuo discloses an interlocking device in which two third components (each vertical portion of 40 is a separate component) are inserted into each second component, the two third components being spaced apart to abut respectively against opposite inner walls of the first component, thus preventing the second component from moving with respect to the first component.

Regarding claim 15, Mitsuo discloses an interlocking device in which the components are made from plastics material, metal or wood or from a combination of these materials.

Claims 1, 7, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by McNalley et al. (McNalley – US 6,679,481).

Regarding claim 1, McNalley discloses an interlocking device for locking components together, comprising a first tubular component (12), a second component (14) arrangeable to interconnect with the first component, the second component having an opening which, in use, lies within the hollow interior of the first component, and a third component (18) insertable into the opening to lie within the hollow interior of the first component thus locking all three components together.

Regarding claim 7, McNalley discloses an interlocking device in which the second component fits into an aperture extending through side walls of the first component.

Regarding claim 8, McNalley discloses an interlocking device comprising a fence in which a plurality of said first components are spaced apart to form upright posts of the fence and at least one of said second components extends between at least two uprights to form a cross rail of the fence.

Regarding claim 9, McNalley discloses an interlocking device comprising a fence wherein rails can be set at various angles to allow the fence to change direction, for example to go round corners (as shown in Figure 9).

Claims 1, 7, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Demanega (US 3,426,126).

Regarding claim 1, Demanega discloses an interlocking device for locking components together, comprising a first tubular component (2), a second component (3) arrangeable to interconnect with the first component, the second component having an opening which, in use, lies within the hollow interior of the first component, and a third

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component (5) insertable into the opening to lie within the hollow interior of the first component thus locking all three components together.

Regarding claim 7, Demanega discloses an interlocking device in which the second component fits into an aperture extending through side walls of the first component.

Regarding claim 8, Demanega discloses an interlocking device comprising a fence in which a plurality of said first components are spaced apart to form upright posts of the fence and at least one of said second components extends between at least two uprights to form a cross rail of the fence.

Regarding claim 9, Demanega discloses an interlocking device comprising a fence wherein rails can be set at various angles to allow the fence to change direction, for example to go round corners (as shown in Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuo (JP 2001-262871).

Regarding claim 13, Mitsuo discloses an interlocking device but fails to disclose that each component comprises a tube (only 40 is not disclosed as a tube). However,

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it would have been an obvious matter of engineering design choice at the time of applicant's invention to modify the arrangement of Mitsuo to utilize a tubular joint pin to save material and reduce material cost.

Regarding claim 14, Mitsuo discloses an interlocking device but fails to disclose that the tubes have a substantially square cross-section. However, it would have been an obvious matter of engineering design choice at the time of applicant's invention to modify the arrangement of Mitsuo to utilize tubes that have a substantially square cross-section for improved aesthetics and reduced cost.

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrett (US 3,654,877).

Regarding claim 13, Barrett discloses an interlocking device but fails to disclose that each component comprises a tube (only 44 is not disclosed as a tube). However, it would have been an obvious matter of engineering design choice at the time of applicant's invention to modify the arrangement of Barrett to utilize a tubular joint pin to save material and reduce material cost.

Regarding claim 14, Barrett discloses an interlocking device but fails to disclose that the tubes have a substantially square cross-section. However, it would have been an obvious matter of engineering design choice at the time of applicant's invention to modify the arrangement of Barrett to utilize tubes that have a substantially square cross-section for improved aesthetics and reduced cost.


Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Murphy (US 3,957,250), Lathrop (US 2,557,002), Bright (US 3,921,960), Willis (US 4,477,059), O'Sullivan (US 4,723,760), Venegas (US 5,312,089 and US 5,577,714), Junell (US 5,967,498), Gibbs (US 6,254,064), Price (US 6,314,595), Takagi et al. (US 2003/0213947), McNalley (US 2003/0230745) are cited for pertaining to fences.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Mills whose telephone number is 571-272-8115. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DJM
4/17/2006


James R. Brittain
Primary Examiner